



In re Application of: Rexroad, John
Application No.: 09/193,989
Atty. Docket No.: PHLV0736-036

Art Group: 1771
Examiner: U. Ruddock

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Rexroad, John
Serial No.: 09/193,989
Filed: 11/18/1998

Art Group: 1771
Examiner: Ula Ruddock
Atty. Docket No.:
PHLV0736-036

For: Shrinking Net and System

Mail Stop Non-Fee Amendment
Commissioner For Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Response to Office Action Dated 05/06/2003

Dear Examiner:

Responsive to the Office Action dated 05/06/2003, kindly amend the subject application as follows:

REMARKS

Claim Status

Claims 1-12 are pending in the Application. The Examiner has rejected claims 1-5 and objected to claims 6-12.

Claim Rejections - 35 U.S.C. § 102

The Examiner rejected the applicant's claims under 35 U.S.C. §102(b) which states, "A person shall be entitled to a patent unless. . . (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States." For a claim to be rejected under this statute, it must be anticipated by the prior art. Anticipation occurs when every element of the claimed invention is met. *See, Helifix Ltd. v. Blok-Lok Ltd.*, 208 F.3d 1339 (Fed. Cir. 2000) (stating, "[t]o be anticipating, a prior art reference must disclose 'each and every limitation of the claimed invention[,] . . . must be enabling[,] and must describe . . . [the] claimed invention sufficiently to have placed it in possession of a

person of ordinary skill in the field of the invention"). In this case, not every element of the applicant's claimed invention is met in the prior art.

Rexroad et al., U.S. Patent No. 5,582,266

The Examiner rejected claims 1-5 under 35 U.S.C. §102(b) based upon U.S. Patent No. 5,582,266 issued to Rexroad et al. ("Rexroad '266"). The Examiner indicated that Rexroad '266 discloses a safety and debris net system, yarn that is dipped in a solution which causes shrinkage (Column 1, lines 20-27), a netting system with sag control measure (Column 1, lines 20-27), a plurality of fasteners (Column 2, line 40), and a frame surrounding the net (Fig. 3). The Applicant respectfully disagrees with the Examiner's position.

The Applicant has claimed a net system that is capable of being made taut around a frame due to a shrinkable net fiber that has a reduced length when it is wetted and dried with water. In order for the net system to achieve and maintain the desired tautness, its design includes a rigid frame (5), a net (2) that is made of water soluble yarn capable of high shrinkage rates when wetted and dried, and a device that provides tension to the net, such as eyebolts (12), a tensioning bar (22), or a locating cable (30). In Applicant's claimed invention, the net (2) is attached to the rigid frame (5), and eyebolts (12), a tensioning bar (22), or a locating cable (30) provide the net (2) with tension so that it stays taut between the rigid frame (5). The eyebolts (12) are placed around the perimeter of the rigid frame (5) and hold the net (2) securely in place by providing tension to the net (2) in opposite directions. Additionally, a tensioning bar (22) or locating cable (30) woven within the weave of the net (2) can reduce the number of eyebolts (12) necessary to support the net (2) while still providing the necessary tension. Moreover, the net (2) in Applicant's invention is made of a water soluble shrinkable yarn which reacts to wetting by reduction in length up to a point where strain is imposed on the yarn by an outside force.

Further, Applicant's net (2) made of water soluble yarn capable of high shrinkage rates when wetted and dried is installed on the rigid frame (5) prior to shrinkage. At this point in the assembly, there is slack between the net (2) and the rigid frame (5). Water is subsequently added, and the net (2) shrinks to the point where it is taut between the rigid frame (5). This configuration allows the frame to be assembled with the net (2) attached to

it because there is sufficient slack in the net (2) that is later taken out with the shrinkage step. This aspect of the invention is unique in that the net (2) has no residual slack in it due to the assembly of the rigid frame (5).

In contrast, Rexroad '266 does not disclose a net system similar to Applicant's invention. The frame (Fig. 3) pointed out by the Examiner is not a rigid frame like in Applicant's invention. Rather, Rexroad '266 discloses a border (43, 43', 41, and 41'). The border (43, 43', 41, and 41') is merely the boundary to which the safety net (10) is attached. Moreover, as shown in Fig. 1 of Rexroad '266, the safety net (10) boundary is attached to a structure and a post (6) instead of to a rigid frame.

Further, the yarn described in Rexroad '266 is not the same as that described in Applicant's invention. The yarn described in Rexroad '266 is nylon which is dipped in a chemical solution that induces shrinkage. (Column 1, lines 20-27 and 35-38). Moreover, the yarn described in Rexroad '266 is not water soluble and does not exhibit the shrinkage properties listed in Tables A and B on pages 7-10 of Applicant's invention. In contrast, the shrinkage of the water soluble yarn in Applicant's invention is necessary for the net system to properly function. (Applicant's Claim 1). In order for Applicant's net system to achieve the desired tautness, the frame must be assembled while attached to the net. This can only happen when there is adequate slack in the net. However, the slack is undesirable once the net system is put into place. To take out the extra slack in the net, water is applied to the net made of water soluble shrinkable yarn. The addition of water causes the net to shrink and become taut around the frame. (Applicant's Specification p. 6, lines 10-18 and p. 10, lines 9-13).

Additionally, the shrinkage due to the dipping in the chemical solution is described as an undesired result in Rexroad '266. (Column 2, lines 8-15). Rexroad '266 actually claims an improved net system where the yarn is not chemically treated so as to better control the shrinkage of the safety and debris net system. (Column 2, lines 24-28).

In addition, the sag control measure (Column 1, lines 20-27) described in Rexroad '266 is not similar to that of Applicant's invention. As discussed above, Applicant's net system employs yarn that is capable of high shrinkage rates when wetted and dried with

water and includes eyebolts, a tensioning bar, or a locating cable to prevent sag. Once water is applied to the net system of Applicant's invention, all of the slack is removed, and it will not subsequently sag. (Applicant's Specification p. 2, lines 24-27). It is an object of Applicant's invention to provide a net system where there will be no sagging of the net after it is installed on the frame. (Applicant's Specification p. 1, lines 22-27). In contrast, the sag control measure discussed in Rexroad '266 is implemented at the site where the net is located to prevent subsequent sagging of the net after installation. (Rexroad '266 Column 1, lines 24-27).

Additionally, the C-ring fasteners (9) described in Rexroad '266 are not similar to the adjustable bolts claimed in Applicant's invention. The adjustable bolts in Applicant's invention attach the border of the net to the frame and provide the necessary tension to the net. Further, the adjustable bolts described in Applicant's specification are eyebolts. In contrast, the use of C-ring fasteners in Applicant's present invention would not provide the net system with the required support. The C-ring fasteners (9) in Rexroad '266 are merely used to attach the net to the border. They do not provide tension and do not connect the net to a frame. The C-ring fasteners in Rexroad '266 cannot be equated to the adjustable bolts claimed in Applicant's invention.

Moreover, Rexroad '266 does not disclose a system comprised of weft and warp members that intersect with each other at intersections or nodes. (Applicant's Claim 2). The nodes become locked when the yarn is wetted and dried giving the net system its strength. (Applicant's Specification p. 11, lines 28-33 and p. 12, lines 1-4). This aspect of Applicant's invention is not disclosed or claimed in Rexroad '266. Therefore, not every element of Applicant's invention is disclosed in Rexroad '266 meaning it is not anticipated by Rexroad '266.

Claim Objections

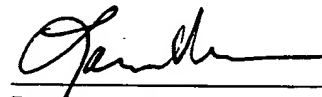
The Examiner has objected to claims 6-12 as being dependent upon a rejected base claim. Applicant respectfully disagrees. As discussed above, claims 1-5 should be allowable because Rexroad '266 does not anticipate the claims. Accordingly, claims 6-12 should also be allowable in dependent form.

Conclusion

Applicant believes it has addressed and responded to every point raised in the Examiner's action. For the reasons stated above, Applicant respectfully requests reconsideration of its application.

Respectfully submitted,

Date: 10/31/03



Lance C. Venable, Reg. No. 41,362
Ellis & Venable
Attorneys for Applicant
101 North First Avenue, Suite 1875
Phoenix, Arizona 85003
(602) 631-9100

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Applicant: John Rexroad
Filing Date: 11/18/1998
Title: Shrink-Net and System

Non-Provisional Patent Application

- ☒ Office Action Response (5 pages)
- ☒ Fee Transmittal
- ☒ Petition for Extension of Time
- ☒ Check Number 9155 in the amount of \$ 475.00
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